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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,223	05/23/2000	John C. Tang	SUN-P4953-RSH	4212
22835	7590	04/08/2004	EXAMINER	
PARK, VAUGHAN & FLEMING LLP 508 SECOND STREET SUITE 201 DAVIS, CA 95616			ZHEN, LI B	
			ART UNIT	PAPER NUMBER
			2126	11

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/577,223

Applicant(s)

TANG ET AL.

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-36 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 36 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1 – 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,223,212 to Batty in view of “Access Control for Collaborative Environments” (hereinafter Shen).**

4. The reference to Batty was cited in previous office actions.

5. As to claim 25, Batty [column 3, line 50 – column 4, line 10; column 4, lines 30 – 67; column 18, line 56 – column 19, line 25; column 25, line 59 – column 26, line 13; column 26, lines 13 – 46] teaches the invention substantially as claimed including a shared window [application sharing, AS, window] for entering commands into a local computer system [computer hosting a shared application, for example computer 110 for hosted application A, Fig. 1], wherein the shared window can be shared with a remote user who can input data [multipoint application sharing, MAS, system that resides at each computer system enables a user at each computer system to share one or more

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application programs with each user at each other computer system] into the shared window from a remote computer system [computer sharing the window of a hosted application, for example computer 120 for hosted application A, Fig. 1] subject to access control [AS protocol provides a set of core control mechanisms whereby ASCEs can implement a range of policies], the apparatus comprising:

a receiving mechanism [an intercept DD layer 638, Fig. 6] that is configured to receive a command [input data] from the remote user [user of the shadow computer] on the remote computer system [an intercept DD layer 638 to intercept calls from the standard DD layer 640 to the operating system...when a user of the shadow computer system inputs data for the shared application program, the standard device driver for the input device is executed and calls the intercept DD layer];

wherein the command is directed toward the local computer system [host computer system] in order to operate the local computer system [a user of the shadow computer system inputs data for the shared application program... forwards those packeted input data to the controlling task 612 of the host computer system, Fig. 6];

a filtering mechanism [AS protocol also defines an additional mediated set of control mechanisms] that is configured to pass the command through a filtering process [managing the right to provide input to hosted and/or shadow windows], and to execute the command on the local computer system if the command passes the filtering process [AS protocol provides a set of core control mechanisms whereby ASCEs can implement a range of policies...AS protocol also defines an additional mediated set of control mechanisms, which build upon the core control mechanisms...the core AS control

protocol is based on managing the right to provide input to hosted and/or shadow windows]; and

a display mechanism that is configured to display the command on the shared window on the local computer system [transmits the messages to the host window] so that a local user can view the command [controlling task 612 retrieves the input data from the shadow queue 622 forwards the input data to the operating system...then generates messages corresponding to the input data and transmits the messages to the host window... shared application program treats input data entered on the shadow computer system as if it were generated locally at the host computer system, Fig. 6];

wherein the display mechanism is configured to allow the command to be displayed on a remote copy of the shared window [shadow window] on the remote computer system, so that the remote user can view the command [for each hosted window, there is a corresponding shadow window that is displayed by each ASCE that is viewing...shadow windows are displayed by the ASCE and correspond to a hosted window on the host ASCE...all updates to the host windows are reflected in both the shadow bitmap and the shadow window].

6. Although Batty teaches granting permission to execute commands on the local computer system [allow requesting ASCE to take control] based on an approval received from a user [such as interacting with the local end-user] of the local computer system [When the local value is Confirm, the ASCE utilizes a purely local mechanism (such as interacting with the local end-user) to determine whether to allow the requesting ASCE to take control and then responds with either a Confirm Take

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Response or Deny Take Response...to the requesting ASCE; col. 22, line 63 – col. 23, line 25], Batty does not teach granting permission to execute command on a per-command basis.

However, Shen teaches a collaborative environment [see abstract, p. 51], granting permission to execute the command on the local computer system [Suite supports positive rights, that is, allows explicit granting of a right; Section 5.1, p. 53] on a per-command basis [suite supports protection of fine-grained active variables; Section 5.3, p. 53] by a user [user hss] of the local computer system [user hss (right windows) denies rxc the elide right to the function getvalue, Fig. 2; Section 5.3, p. 53 – 54] and allowing user rights to change dynamically [users may take and relinquish the suite role dynamically; Section 5.1, p. 53].

7. It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of granting permission to execute a command on a per-command basis by a user of the local computer system as taught by Shen to the invention of Batty because this allows the system of Batty to support fine-grained access rights and independent specification of each access right of each user on each command [Section 2, Flexibility; p. 52 of Shen].

8. As to claim 26, Batty teaches [column 23, lines 1 – 20] if the shared window is in an approval mode [value is Confirm], the filtering mechanism is configured to allow the local user of the local computer system to approve the command [interacting with the local end-user to determine whether to allow the requesting ASCE to take control], and

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to allow the command to pass the filtering process if the local user approves the command [when the negotiated value is Confirm, one or more peer ASCEs require that the taking of control requires confirmation by those peer ASCEs and the ASCE sends a Take Control Request MediatedControlPDU to all ASCEs...when the local value is Confirm, the ASCE utilizes a purely local mechanism, such as interacting with the local end-user, to determine whether to allow the requesting ASCE to take control].

9. As to claim 27, Batty teaches [column 23, lines 1 – 20] if the shared window is in a view-only mode [value is Never], no commands received from the remote user are allowed to pass the filtering process [negotiated value is Never, one or more peer ASCEs will not permit the taking of control and the ASCE cannot do so].

10. As to claim 28, Batty teaches [column 23, lines 1 – 20] if the shared window is in an execute mode [value is Always], all commands received from the remote user are allowed to pass the filtering process [negotiated value is Always, the taking of control is unmediated and the ASCE initiates the Core, Request Control, action to take control].

11. As to claim 29, Batty as modified [Section 5.6, p. 57 of Shen] teaches a pre-specified list of safe commands [extended form of access list] that are allowed to pass the filtering [when a subject *s* is checked against the access rights *r* on object *o*, we first search the access list associated with *o*... If no definite right can be calculated from the subject space, inheritance in the rights dimension is used. If no definite right can be

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inferred based on the access list associated with the object, we use inheritance in the object dimension to infer the right. Finally, if we still do not find a definition for the right, we infer a negative right].

12. As to claim 30, Batty teaches [column 23, lines 1 – 20] the filtering mechanism is configured to allow the local user of the local computer system to approve the command [interacting with the local end-user to determine whether to allow the requesting ASCE to take control], and allow the command to pass the filtering process if the local user approves the command [when the negotiated value is Confirm, one or more peer ASCEs require that the taking of control requires confirmation by those peer ASCEs and the ASCE sends a Take Control Request MediatedControlPDU to all ASCEs...when the local value is Confirm, the ASCE utilizes a purely local mechanism, such as interacting with the local end-user, to determine whether to allow the requesting ASCE to take control]. As to a pre-specified list of safe commands, see claim 29 above.

13. As to claim 31, Batty teaches [column 34, lines 42 – 60] the display mechanism is configured to display commands from different users in different colors on the shared window [ColorTable Cache capability set provides capabilities for the colortable cache characteristics of the issuing ASCE...these capabilities are used to negotiate values used to construct Cache ColorTable orders in UpdatePDUs].

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14. As to claim 32, Batty teaches [column 25, line 59 – column 26, line 13] the display mechanism is configured to send an update for the shared window from the local computer system [host window] to the remote computer system [shadow window]; wherein the update includes the command [all updates to the host windows are reflected in both the shadow bitmap and the shadow window].

15. As to claim 33, Batty teaches [column 19, lines 1 – 25] the receiving mechanism is configured to receive a second command from a second remote user on a second remote computer system [in cooperating mode, cooperating ASCEs within the conference serially acquire the right to provide input to hosted and shadow windows].

16. As to claim 34, Batty teaches [column 18, line 56 – column 19, line 25] the filtering mechanism is located on at least one of: the remote computer system [ASCE that has a shadow window], the local computer system [ASCE that is hosting application], and a shared server that is separate from the remote computer system and the local computer system [AS protocol provides a set of core control mechanisms whereby ASCEs can implement a range of policies...AS protocol also defines an additional mediated set of control mechanisms, which build upon the core control mechanisms...the core AS control protocol is based on managing the right to provide input to hosted and/or shadow windows].

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17. As to claim 35, Batty teaches the command is in the form of character input [AS, application sharing, output stream consists keyboard events; column 6, lines 30 – 45].

18. As to claim 36, Batty teaches the command is in the form of an action applied to a graphical user interface [AS, application sharing, output stream consists of interleaved keyboard and pointing device events; column 6, lines 30 – 45].

19. As to claims 1 – 12, these are method claims that correspond to apparatus claims 25 – 36; note the rejections to apparatus claims 25 – 36 above, which also meet these method claims.

20. As to claims 13 – 24, these are product claims that correspond to apparatus claims 25 – 36; note the rejections to apparatus claims 25 – 36 above, which also meet these product claims.

Response to Arguments

21. Applicant's arguments filed January 12, 2004 have been fully considered but they are not persuasive.

22. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "grants permission to execute a command at run-time on a per-command basis based on an approval received from a user of the local computer system," emphasis

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added; p. 10, lines 9 – 11) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

23. Examiner notes that the claims do not clearly recite the features of the application as disclosed in the specification. The specification discloses allowing a local user to approve a command at run-time, which allows the command to pass the filtering process [p. 10, lines 22 – 23 of specification]. Therefore, permission to execute the command on the local computer system is granted on a per-command basis based on an approval inputted by a user of the local computer system at run-time. However, the claims do not clearly recite these features. For example, claim 25 [lines 18 – 20] recites “wherein permission to execute the command on the local computer system is granted on a per-command basis based on an approval received from a user of the local computer system.” The limitation does not specify when the approval was received, i.e. prior to or during execution of the program. A reasonable interpretation of the limitation is that permission to execute the command was received from the user prior to execution of the program and stored in memory. The process then accesses the memory to decide whether to grant permission or not. The limitation recited above does not require the local user to input approval of a command at run-time.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (703) 305-3406. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen
Examiner
Art Unit 2126

lbz
March 23, 2004



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